

# Timeliness and Completeness of Reporting during Implementation of South South Carolina's Health Electronic Surveillance System

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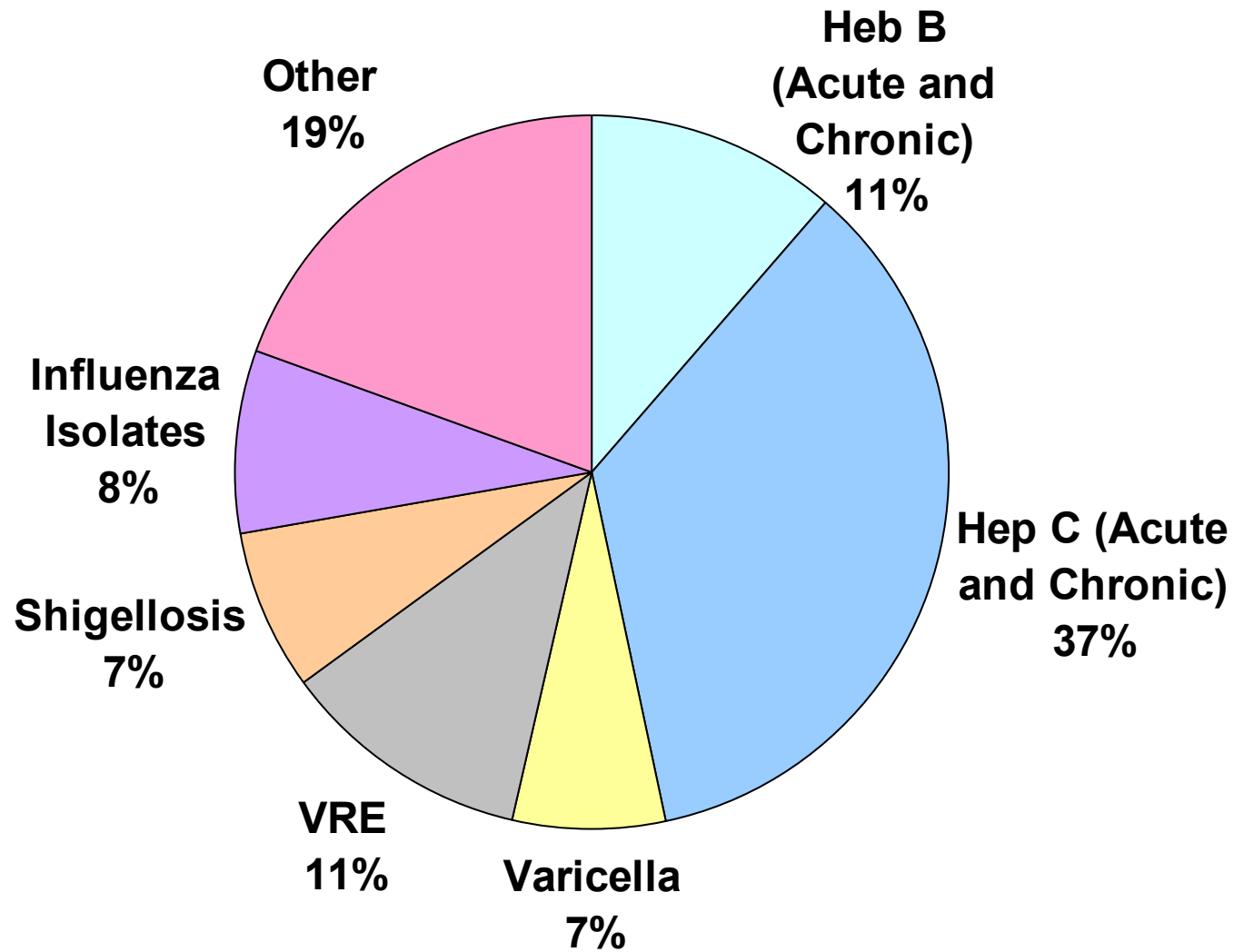
## Three Questions

- Has timeliness improved?
- Has completeness improved?
- What needs to be done?

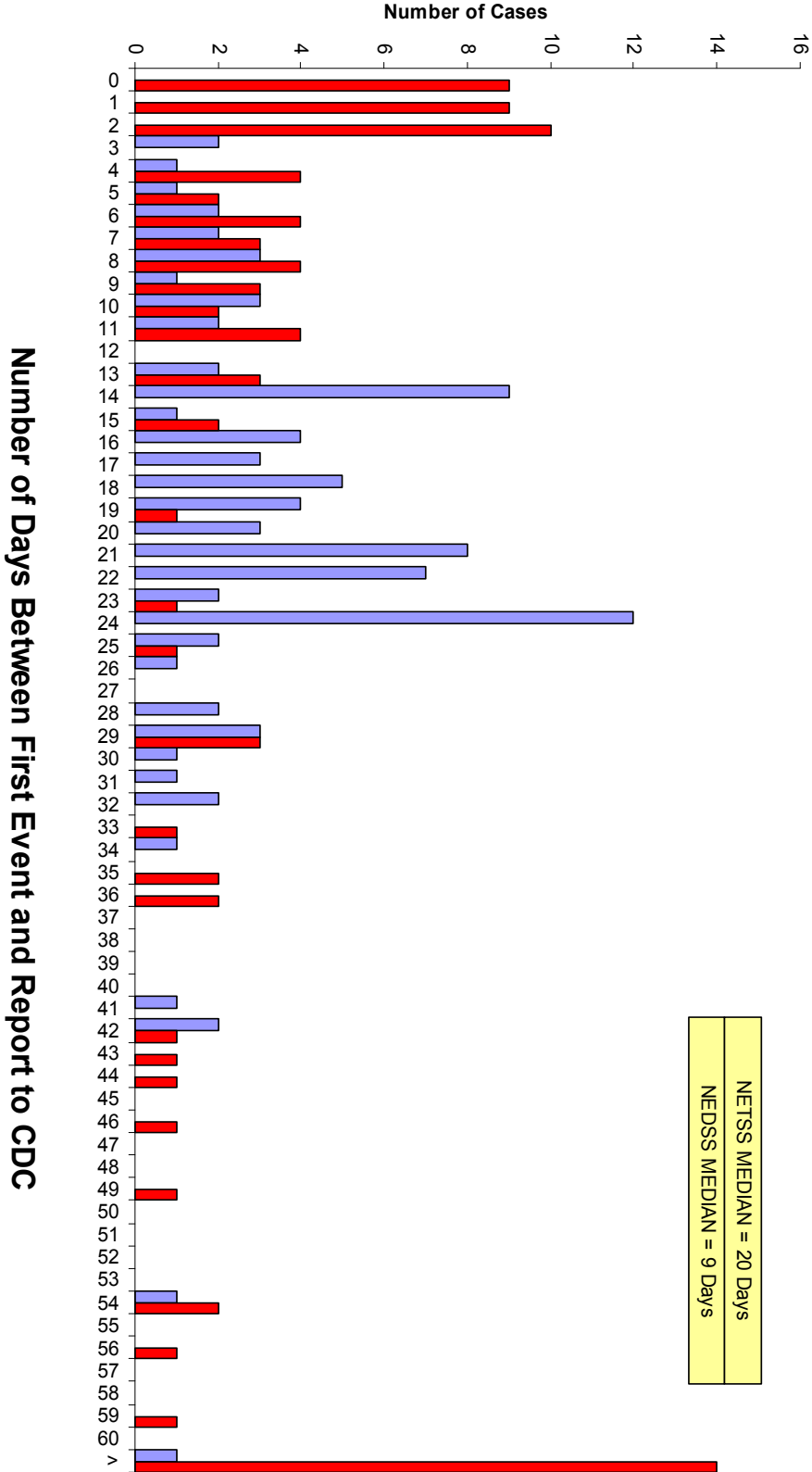
# CHESS

- Carolina's Health Electronic Surveillance System
- The SC implementation of the NEDSS Base System
- Began parallel testing May 5, 2003
- Went "live" on July 28, 2003 in the Central office
- All districts have been live since August 2004

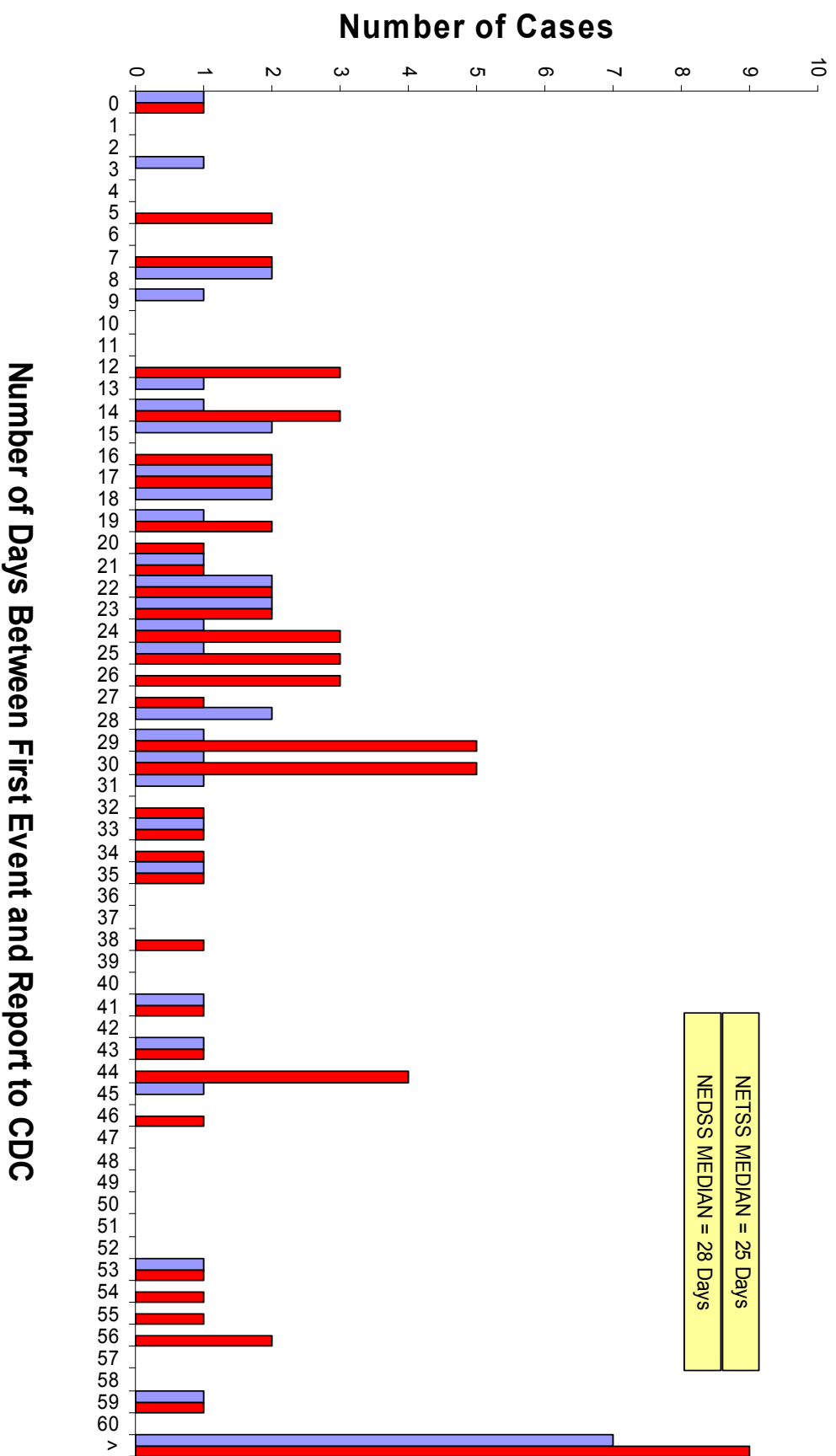
# Confirmed and Probable Cases - CHESS



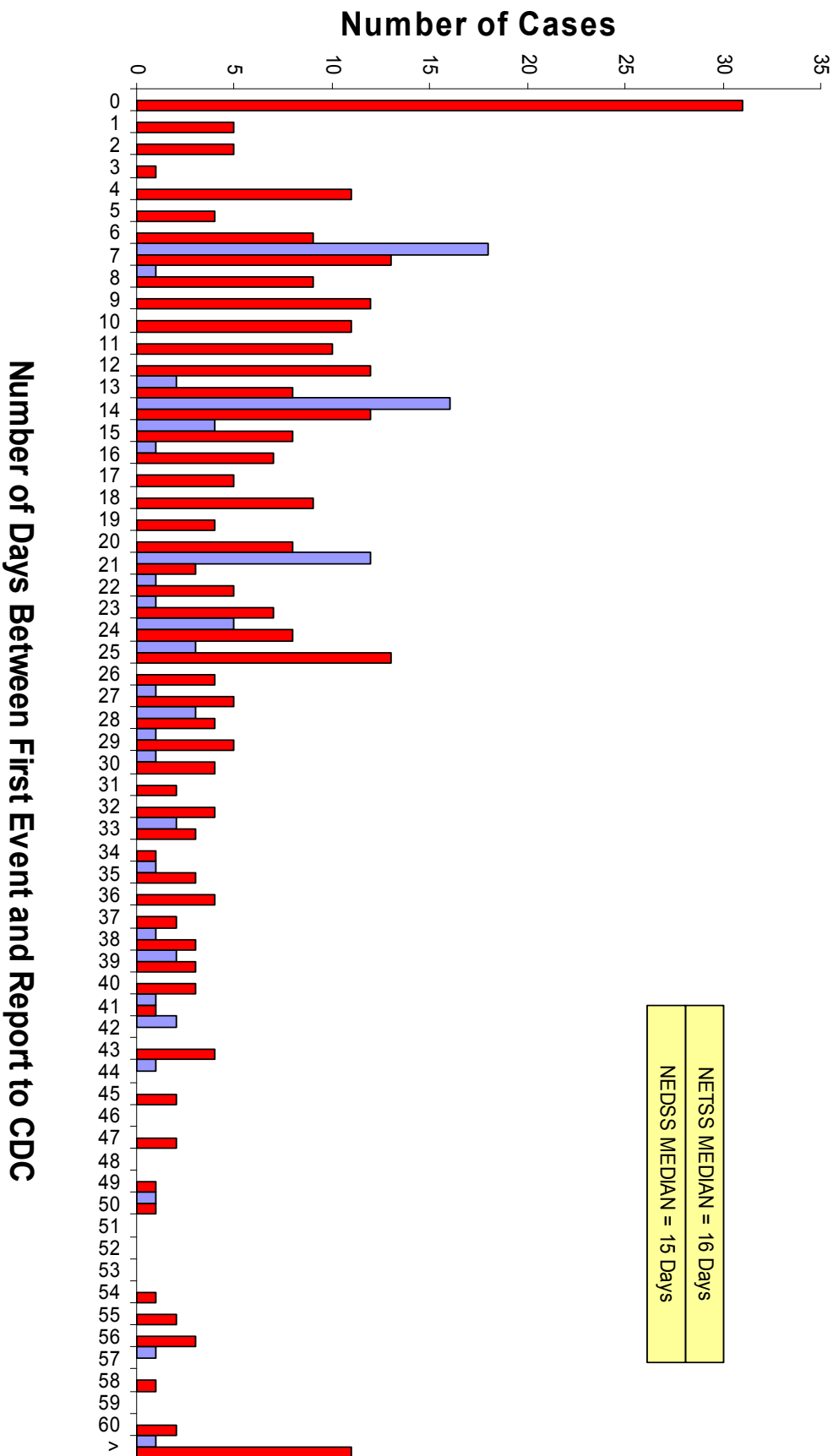
# CAMPYLOBACTER



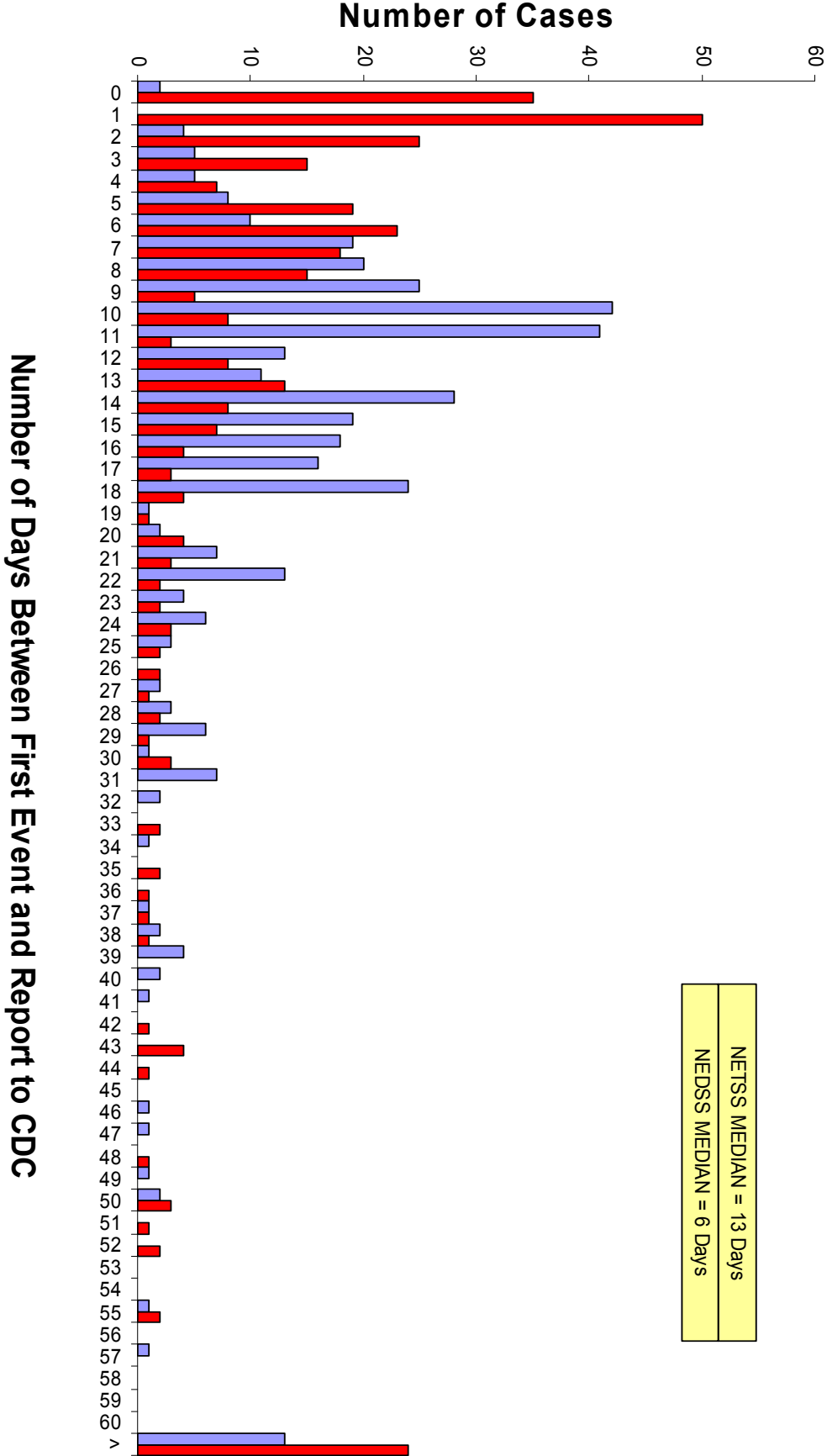
# PERTUSSIS



# SHIGELLA

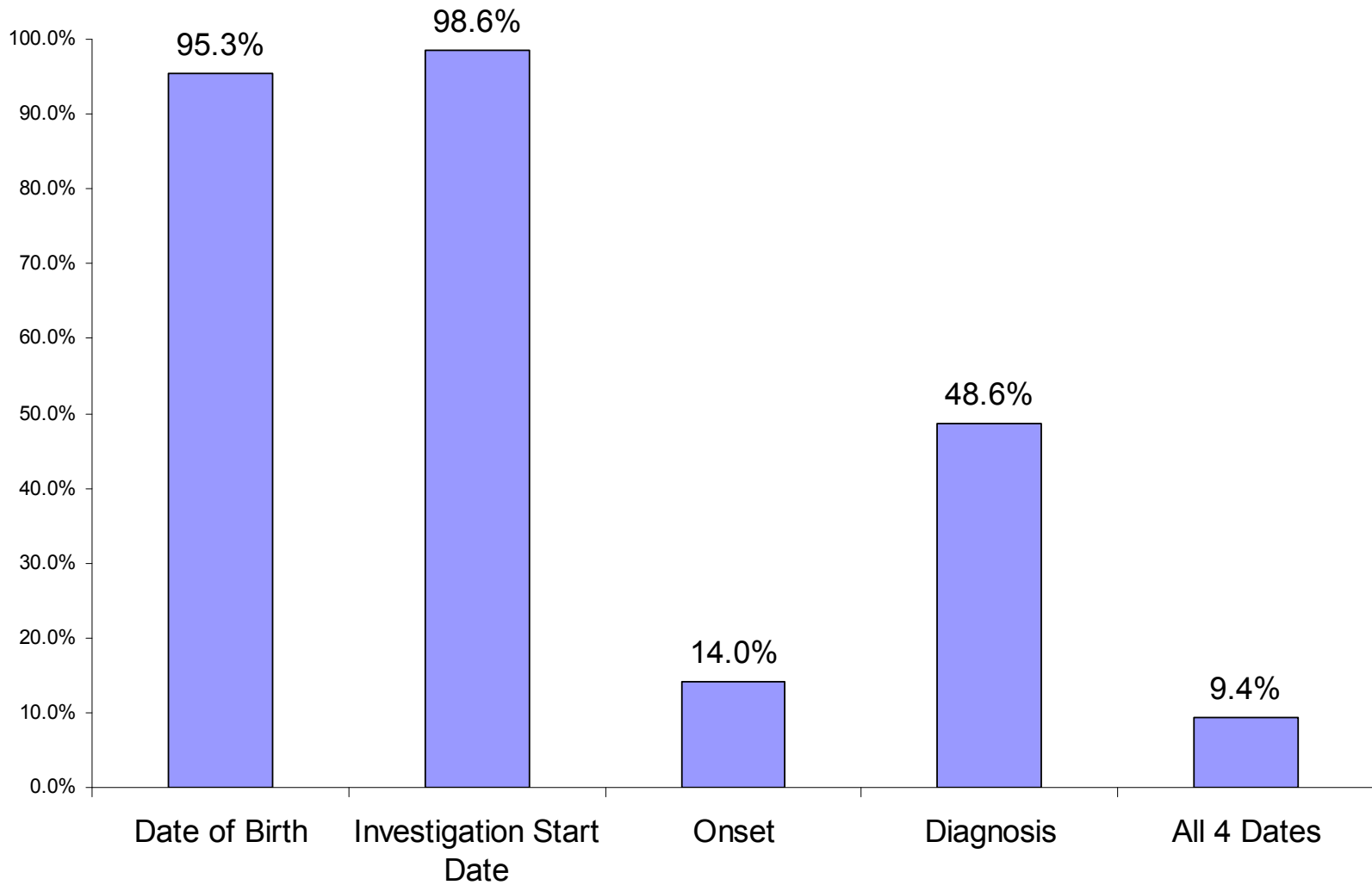


V. RES ENTER

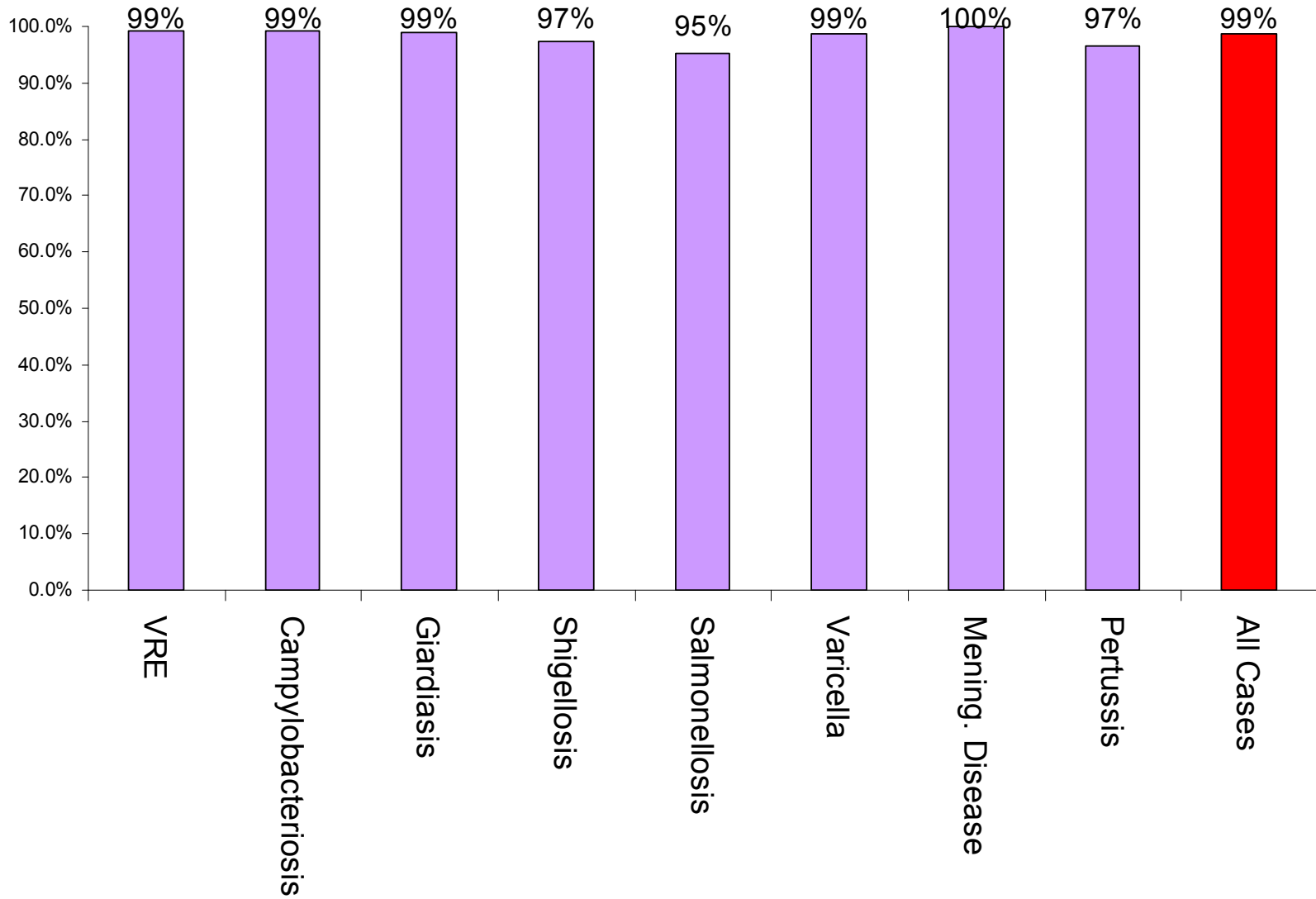




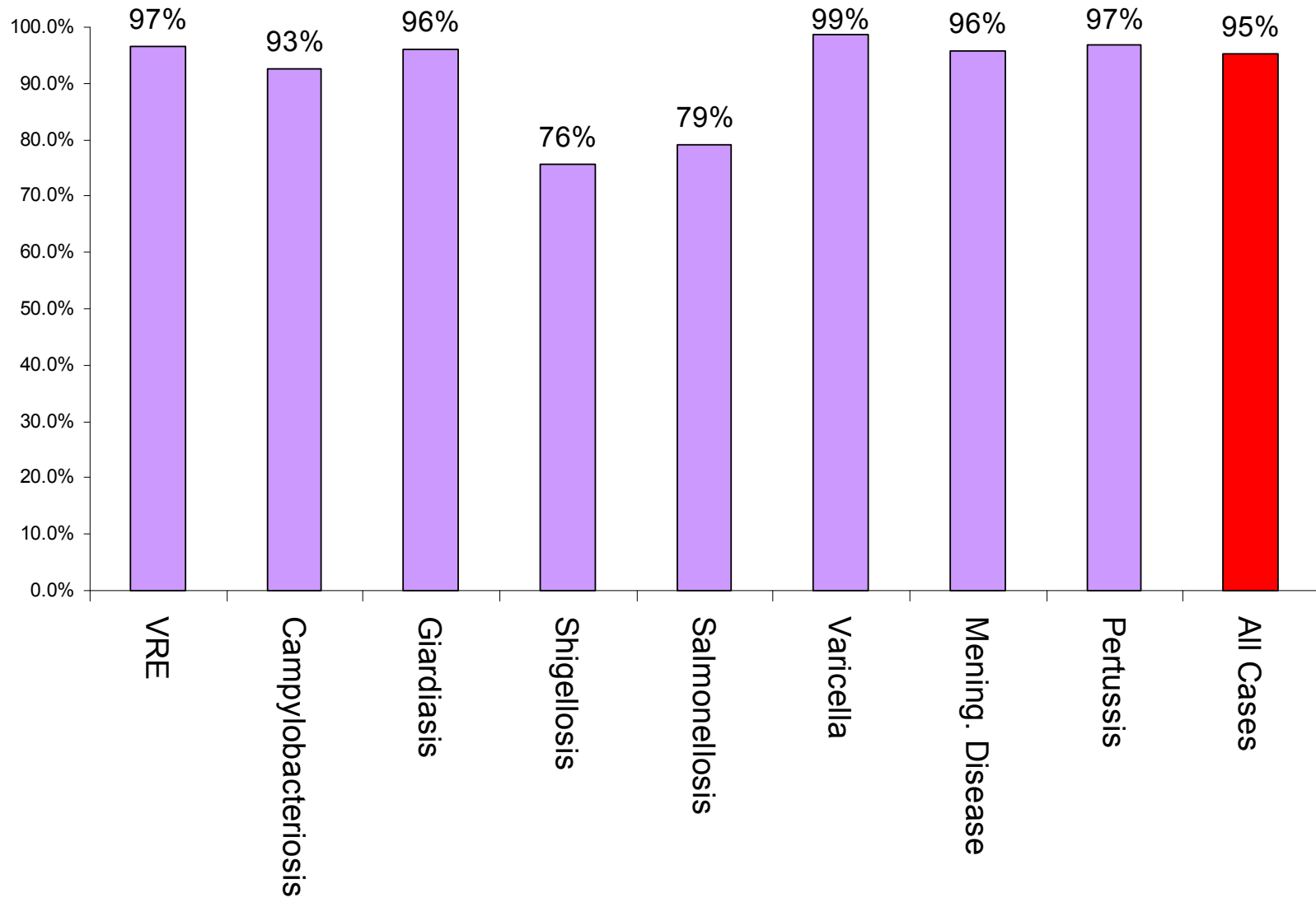
# Important Case Dates



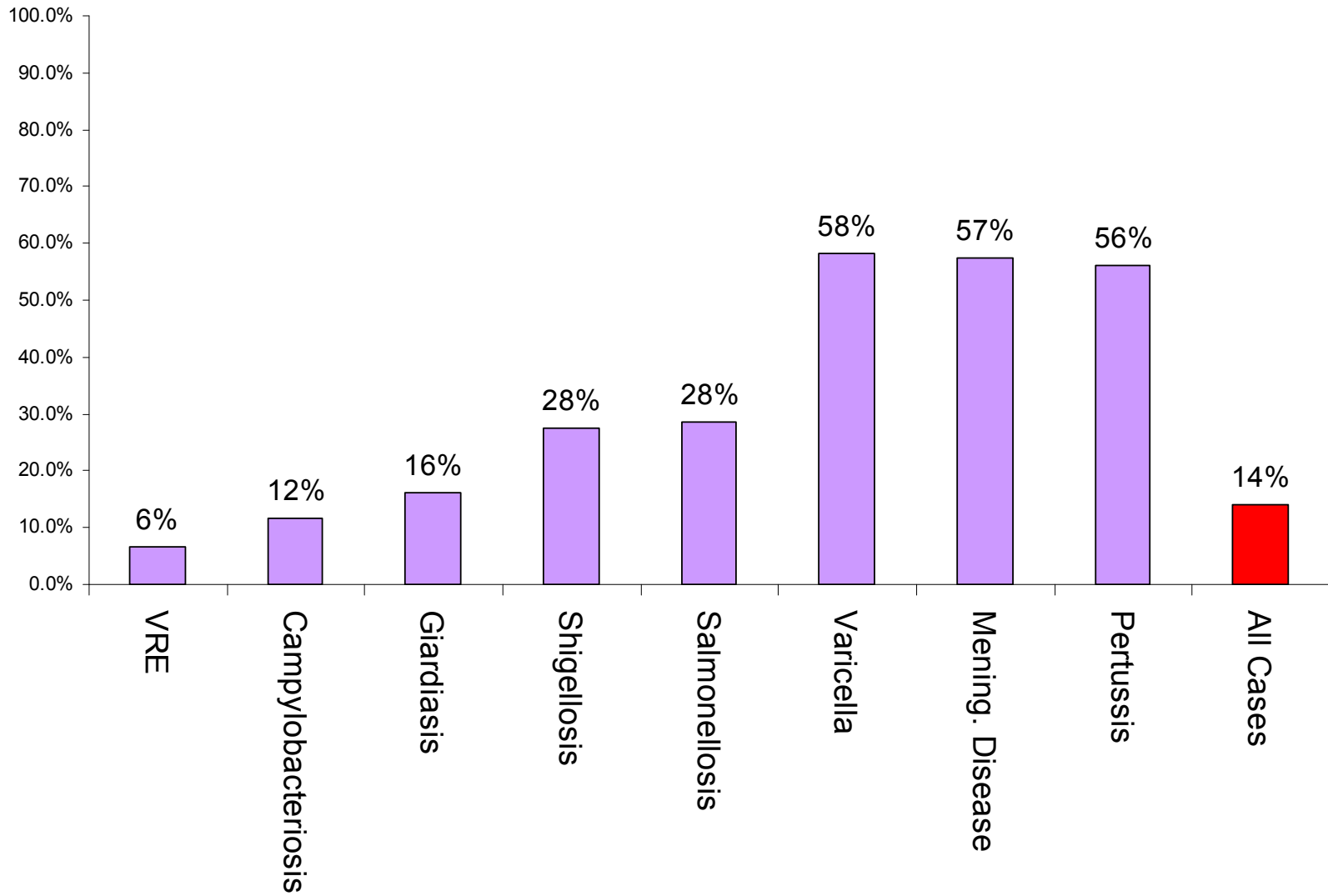
# Percent of Cases With Date of Birth



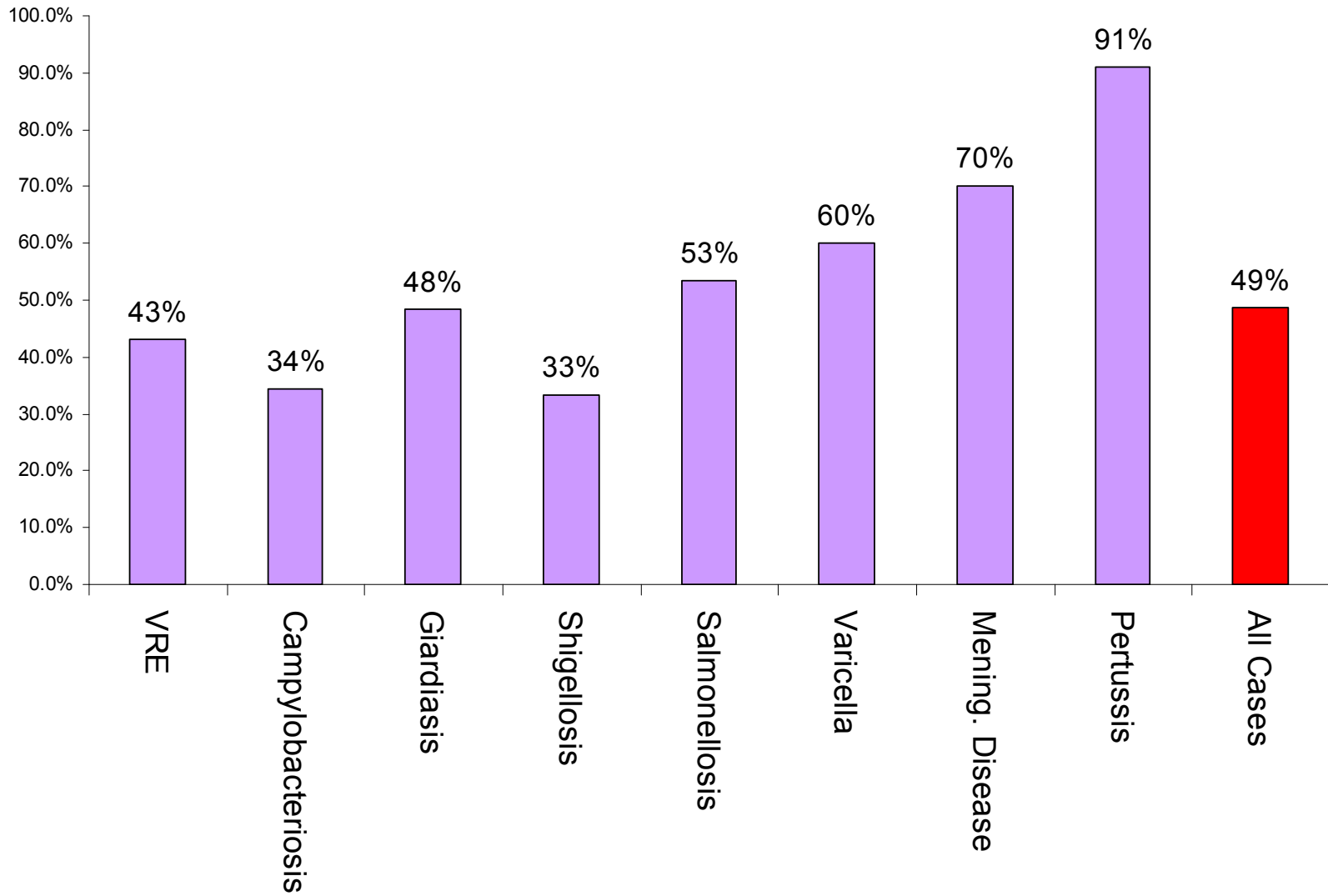
# Percent of Cases With Investigation Start Date



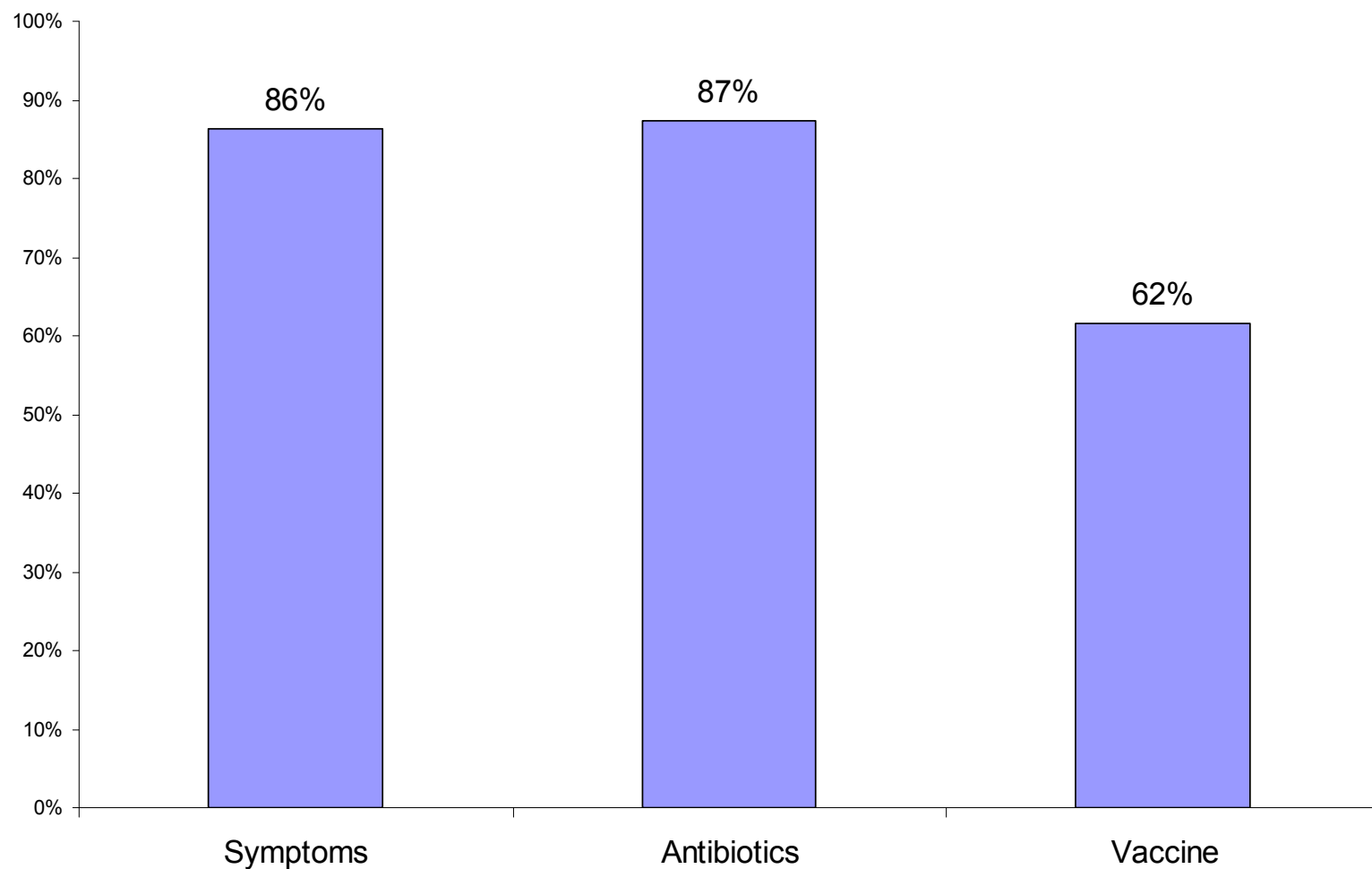
# Percent of Cases with Onset Date



# Percent of Cases With Diagnosis Date



# Completeness of Pertussis Investigations (N = 584)



## Use of External Data for Verification

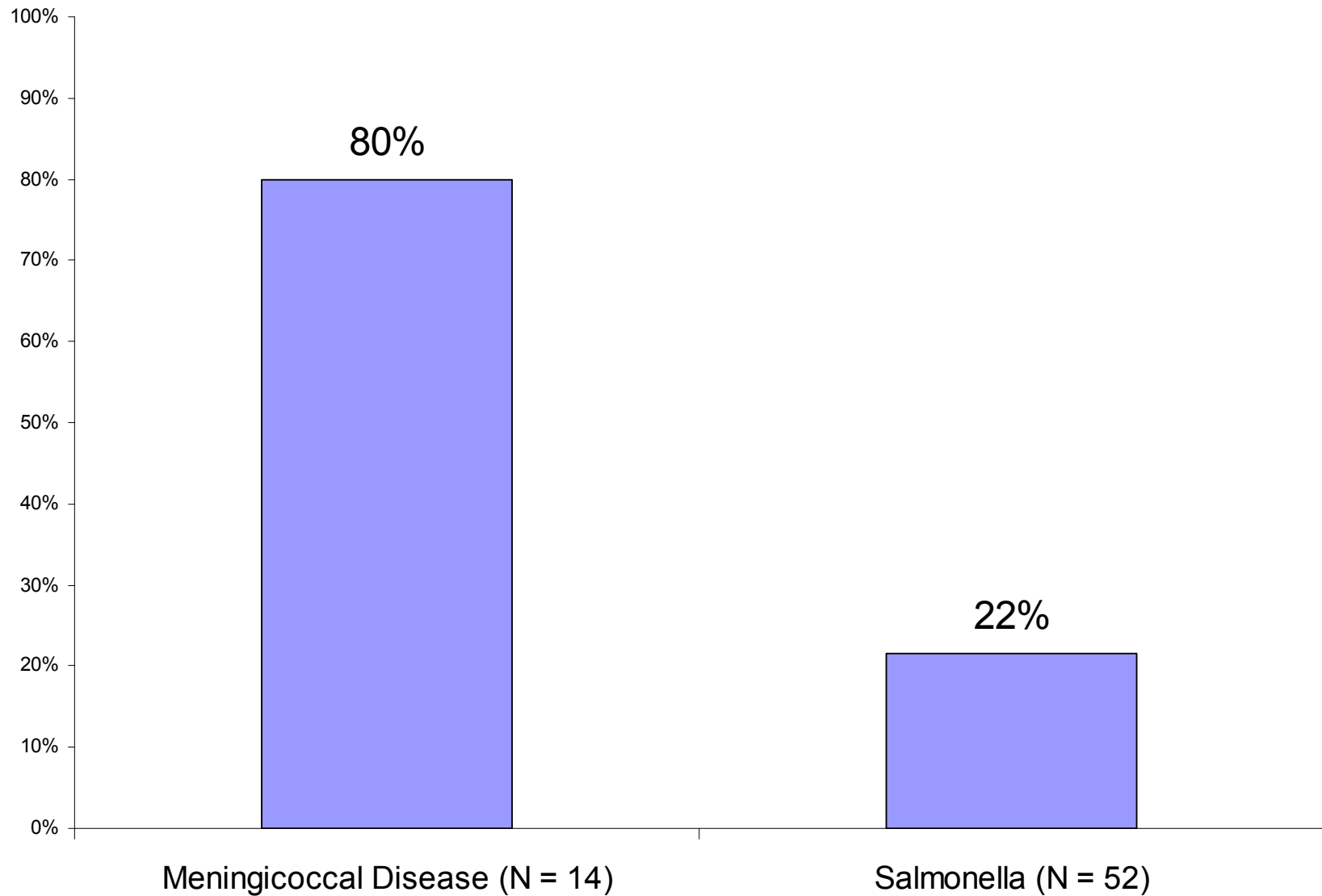
- Hospital Discharges
- Bureau of Labs

## Use of SC Hospital Discharge System to Verify Sensitivity of CHES Case Reports

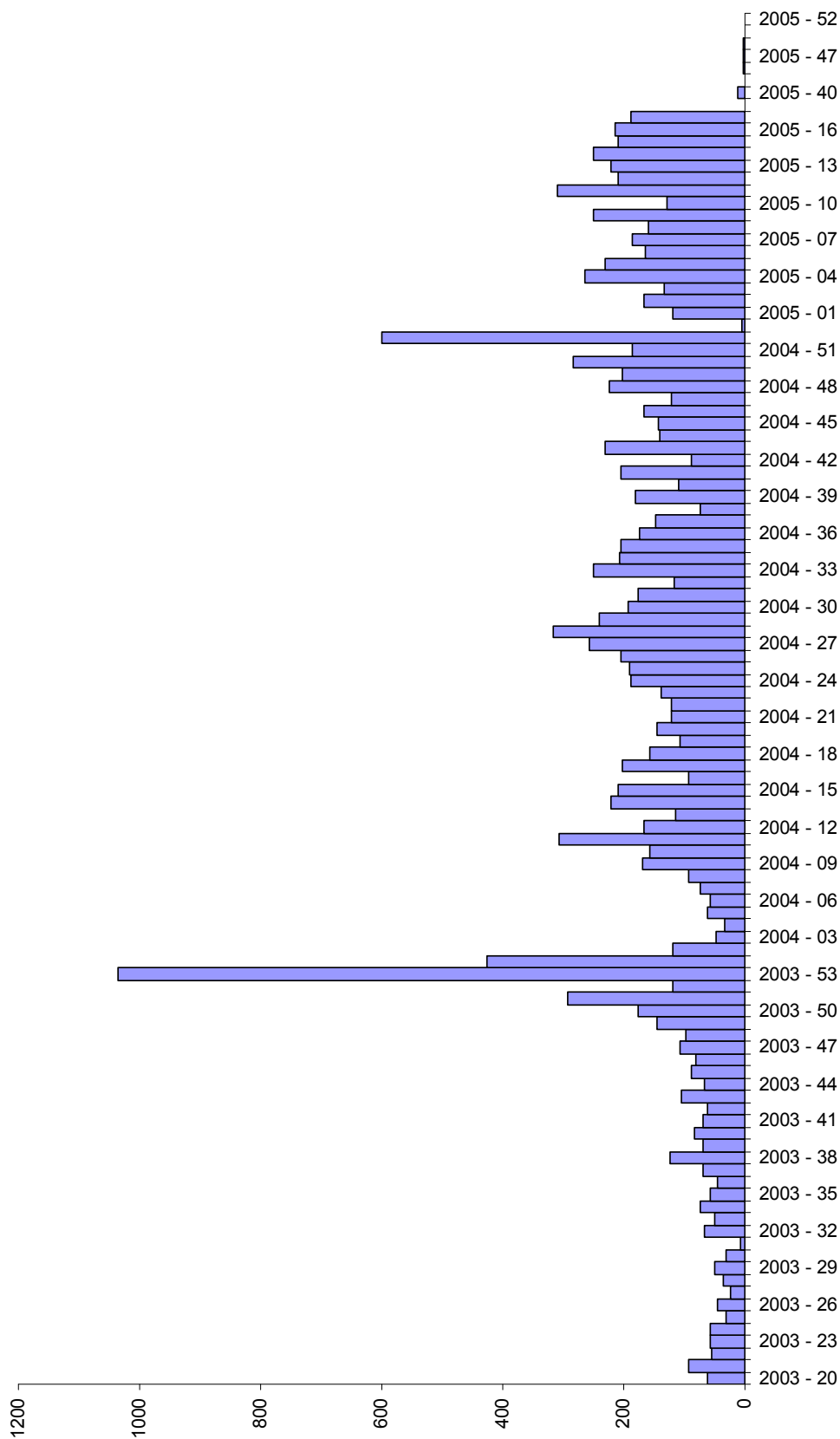
- Almost 100% standard hospital claims are reported into a statewide system by statute
- Includes up to 10 D/C diagnoses and full identifier information, length of stay, charges
- Readily available to State Health Department and useful to assess sensitivity of CHES



# 2004 Hospital Discharges In CHESS



# Cases by MMWR Week Reported to CDC



# 2004-2005 Flu Season Positive Flu Cultures

		Bureau of Labs	
		Yes	No
CHESS	Yes	33	17
	No	108	?

# Future of CHES Data Quality

## What Needs to be Done?

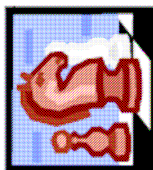
- Training
- Communication
- Bottlenecks and Backlogs
- Expand to Provider Data Entry  
(eg. Hospital labs, ICPs, ERs)
- Electronic Lab Reporting
- Monitoring of data quality

## CHES Training

- New employees trained one-on-one in districts or Central Office
- On the job / mentoring
- Advanced training sessions at the Central Office
- Site visits as needed.

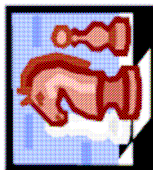
# Communication

- Email updates
- Monthly Newsletter
- Intranet Site
- Announcements at monthly epi meetings



# The CHESS Club

A Monthly Update for Users of Carolina's Health Electronic Surveillance System



## SERVICE PACK 2

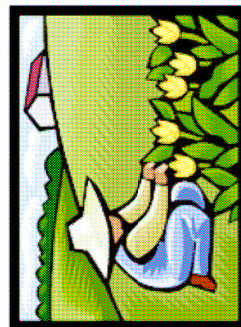
We have had a couple of delays in the installation of Version 1.1.3, Service Pack 2. One was due to a glitch when the installation was run, and the second was a postponement so as not to slow the districts down in submitting the list of the 2004 data.

With those two issues behind us, we hope to be going live with Service Pack 2 on Tuesday, May 3. Don't plan on using CHESS after 3:00 pm that day, but it should be up by Wednesday. Users will be advised as to how things are going via email.

Don't forget—once the new Service Pack is up, you can enter Lyme Disease directly into CHESS. This is the ONLY new disease that we are adding right now—please continue to send Animal Rabies to Environmental Health and to let us know if you need to know what to do with a report.

For additional details on Service Pack 2, see the March 2005 issue of The CHESS Club.

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## WELCOME NEW CO STAFF

Marya Barker, Regional Epidemiologist

Marya was born on Lookout Mountain TN, which is why one leg is longer than the other. She spent her formative years in Anderson but since joining DHEC, she refers to her old stomping grounds as App 1. Oddly choosing to attend USC instead of Clemson, Marya graduated with an undergraduate degree in Political Science and started her career in accounting. It was dull, dull, dull...so she returned to school for an MPH. She has worked for the MUSC Agromedicine Program, DHEC Site Assessment Section (Superfund), and DOT Environmental Section. None of these positions were nearly as interesting or fulfilling as acute disease epi so she is very happy to be at DHEC. Marya is married and has a 6 year old daughter who brings her great joy and also unknowingly acts as a sentinel for disease in the pediatric population.

Marcia L. Hendrick, State Public Health Veterinarian

Dr Marcia L. Hendrick graduated from the University of Tennessee with a BS in Agriculture and the DVM degree in 1982. She practiced clinical veterinary medicine in Tennessee until 1995, when she entered the US Air Force as a Public Health Officer. In 1991, Dr Hendrick transferred from the US Air Force to the Public Health Service (PHS) beginning her career with the Food and Drug Administration (FDA) at the Center for Veterinary Medicine (CVM). She entered the PHS Epidemiology Training Program in 1992 and completed a MPH at the Johns Hopkins University.

After receiving the MPH, she worked with epidemiologists at the FDA Center for Food Safety and Applied Nutrition (CFSAN) to complete an Epidemiology Fellowship. Following her training, Dr Hendrick accepted a position with the FDA Center for Devices and Radiological Health (CDRH) as an Epidemiologist in the Office of Surveillance and Biometrics. At CDRH, she provided epidemiologic review of postmarket adverse event reports associated with medical devices as well as providing consultation and review of premarket and postmarket studies. Dr Hendrick returned to the FDA Center for Veterinary Medicine in 1998. There she served as the Coordinator for the National Antimicrobial Resistance Monitoring System (NARMS), a collaborative project between FDA, USDA, and CDC. Dr Hendrick recently accepted a position with the South Carolina Department of Health and Environmental Control as the State Public Health Veterinarian. She is board certified in Veterinary Preventive Medicine and is a Fellow of the American College of Epidemiology. Dr Hendrick has authored and co-authored many scientific publications and is the recipient of numerous awards including the PHS Outstanding Service Medal and the PHS Secretary's Award for Distinguished Service.

## KEEP IN TOUCH!

We want to hear from you. If you have a question, comment, concern or upcoming event related to CHESS, let us know. Call Claire Youngblood at 803-898-0165 or email [youngblood@dhec.sc.gov](mailto:youngblood@dhec.sc.gov).



HAPPY CHESSING!





# The CHESS Club

A Monthly Update for Users of Carolina's Health  
Electronic Surveillance System



## SERVICE PACK 2

We have had a couple of delays in the installation of Version 1.1.3, Service Pack 2. One was due to a glitch when the installation was run, and the second was a postponement so as not to slow the districts down in submitting the last of the 2004 data.

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TIPS AND TRICKS: A FEW LITTLE THINGS

Sorting Investigations

If you have a lot of investigations in your queue, you may want to look at them in a particular order. You might prefer them sorted by date, so that you can address the oldest investigations first, or you might want to sort them by condition and work on a specific disease.

It is easy to sort your queue. At the top of the list is a box with clickable text for Start Date, Investigation ID, Jurisdiction, Condition, and Case Status. Clicking on any of these will sort your investigations by that particular field.

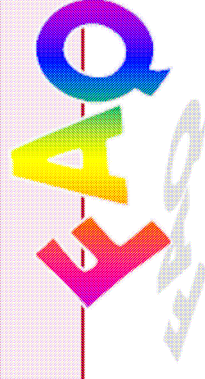
<a href="#">Start Date</a>	<a href="#">Investigation ID</a>	<a href="#">Jurisdiction</a>	<a href="#">Condition</a>	<a href="#">Case Status</a>
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Copying and Pasting Text from CHES

Many users have observed that a popular way of copying and pasting text does not work in CHES. You cannot select text, right-click your mouse, and then select Copy from the popup menu. This is because the right-click menu is not available in CHES. You CAN copy and paste, however. Simply select the text that you want to copy and either click Edit>Copy from the menu bar at the top of your screen OR press Ctrl-C. This not only works for text that you have entered into CHES, but for any text that you can see on the CHES Screen.

Add A CHES Button to Your Browser Links Bar or a Link from your Desktop

## FREQUENTLY ASKED QUESTIONS



**Question:** I have a patient showing up in CHES in two separate files. He has different addresses in each file, but the same social security number, name, and birthdate. Should these two files be merged?

**Answer:** Yes. This is clearly the same person in both files. It very possible that he had one reportable disease when he lived in one location, then moved to another location and has a second reportable disease. Although the investigations for this patient will each contain the address where he was living at the time of his illness, both investigations, as well as all other records for this individual, should all be in a single file.

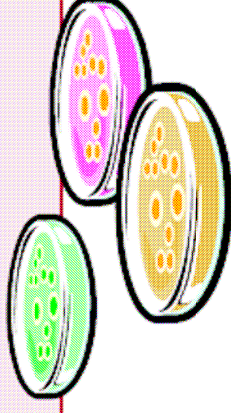


**Question:** I have a patient with both Hepatitis B and Hepatitis C at the same time. Can I put both in the same report?

**Answer:** No. Each unique disease should have it's own lab reports, morbidity reports and investigation. This is true even if the person has two different forms of hepatitis.

## PLEASE INCLUDE SEROTYPES

Beginning with version 1.1.3, the current version of the NEDSS base system that is running on CHES, foodborne illness has been entered into CHES. This has been a big step forward in the development and deployment of the new system, but it also means that we have to be careful when we are dealing with serotypes.



Serotypes are entered in TWO places in CHES—lab reports and investigations. Frequently, an investigation is created before the serotype is known. When the lab report containing the serotype arrives later, it is added as a lab report, and the serotype is included in the lab record.


Resulted Test	Result(s)
<b>Collection Date:</b> <input type="text" value="01/01/2005"/> <small>mm/dd/yyyy</small> <i>(Required for Add/Update Lab Report)</i>	<b>Lab Report Date:</b> <input type="text" value="01/05/2005"/> <small>mm/dd/yyyy</small>
<b>Resulted Test:</b> <input type="text" value="Salmonella serotype, by agglutination"/>	<input type="text"/>
<div>Search</div> <div>Clear</div>	
<b>Specimen Information:</b> <input type="text"/>	
<b>Organism Name:</b> <input type="text" value="Salmonella enteritidis (organism)"/>	
<div>Search</div> <div>Clear</div>	
<b>Numeric Result:</b> <input type="text"/>	
<b>Text Result:</b> <input type="text"/>	



Health Services - CHES - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://dhecnnet/HS/CHES/



# CHES

CAROLINA'S HEALTH ELECTRONIC SURVEILLANCE SYSTEM

## About Chess

CHES is Carolina's Health Electronic Surveillance System. It is South Carolina's implementation of the National Electronic Disease Surveillance System (NEDSS). CHES provides:

- Secure web-based disease reporting.
- Real-time data access at all levels and locations.
- The ability to detect clusters and aberrations in disease events.

## Latest News

CHES is now live in all districts and the Central Office. Disease reports, which were once sent on paper to the Central Office, are now entered directly by the districts and reviewed online by consultants at the Central Office.

## Upcoming Events

- Friday, April 29: Final date to submit 2004 disease reports!
- Tuesday, May 3, 3:00 PM: Scheduled installation of CHES upgrade, v1.1.3 SP2.

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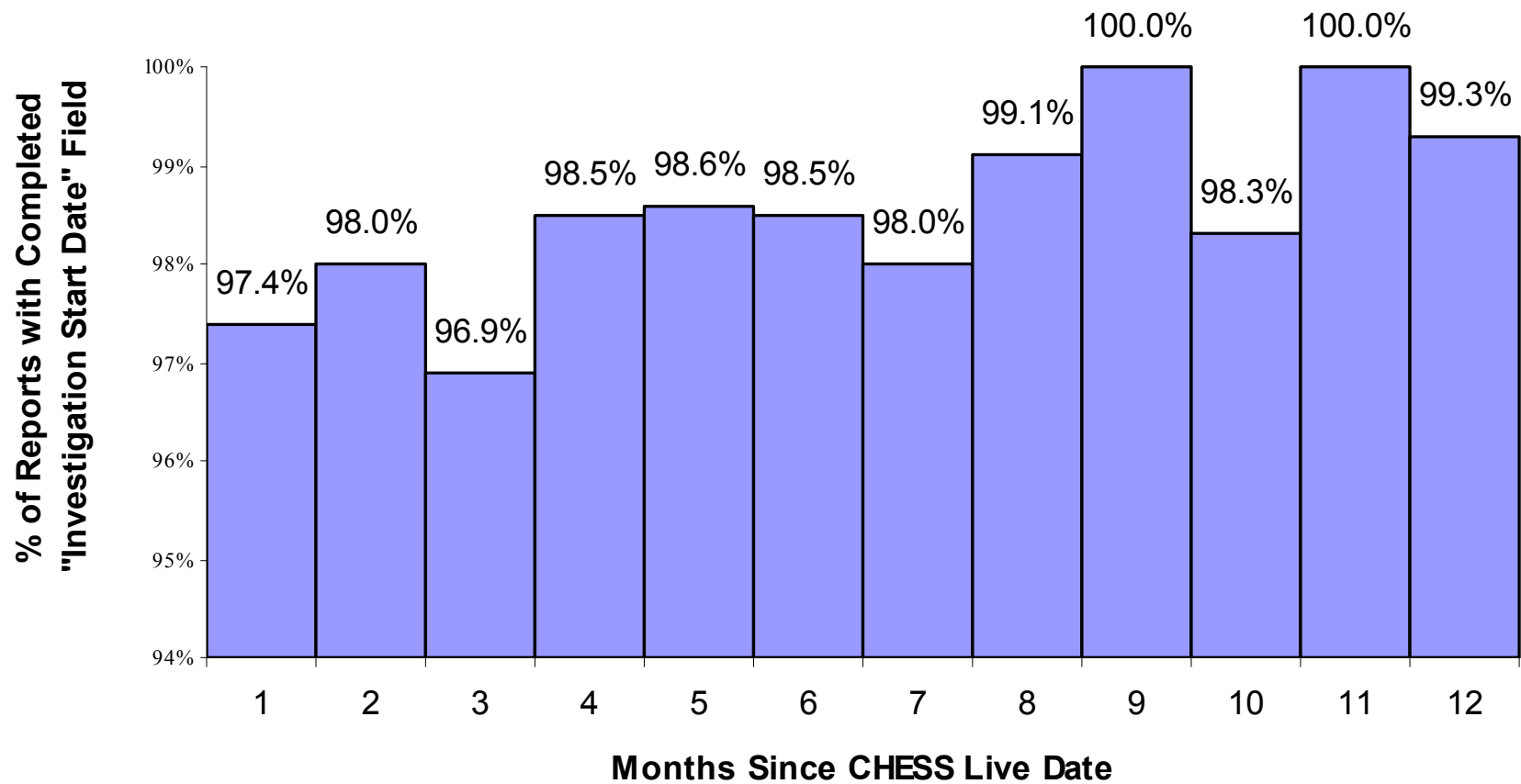
Last updated:  
May-09-2005

Any Questions or  
Comments about this  
page contact  
Claire Youngblood at  
(803) 898-0165

# Data Monitoring

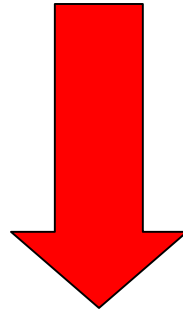
- Reports within CHESS
- Routine error reports
- Automatic email alerts to specific staff members when specific types of records are entered

**Completeness of "Investigation Start Date" Field  
for All Reportable Conditions by Months of Experience**



What's next?  
Stay tuned ...

GIGO



QIQO

